1. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(-5, -7) \text{ and } (-7, 9)$$

A. $m \in [-12, -6]$ $b \in [44, 52]$

B. $m \in [-12, -6]$ $b \in [16, 22]$

C. $m \in [-12, -6]$ $b \in [-52, -46]$

D. $m \in [5, 12]$ $b \in [62, 72]$

E. $m \in [-12, -6]$ $b \in [-6, 6]$

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2. Solve the equation below. Then, choose the interval that contains the solution.

$$-5(-19x + 6) = -11(14x + 18)$$

A. $x \in [-3.99, -3.73]$

B. $x \in [0.91, 1.45]$

C. $x \in [-0.83, -0.37]$

D. $x \in [-1.35, -0.74]$

E. There are no real solutions.

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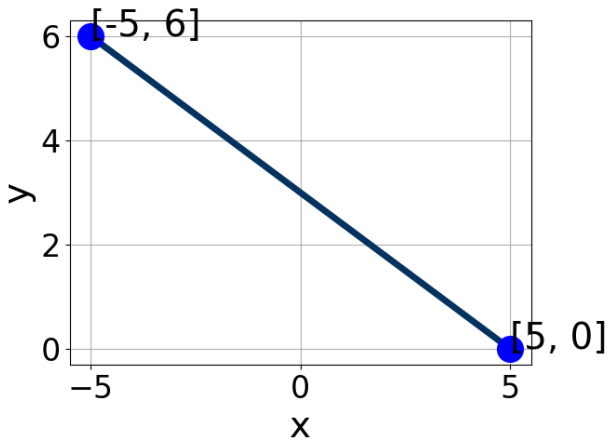
3. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-1.1, 1]$, $B \in [-2.6, 0]$, and $C \in [-6, -2]$

B. $A \in [2.9, 4.4]$, $B \in [-5.1, -4]$, and $C \in [-20, -4]$

C. $A \in [-7.6, 0.5]$, $B \in [-5.1, -4]$, and $C \in [-20, -4]$

D. $A \in [2.9, 4.4]$, $B \in [3.1, 6.3]$, and $C \in [12, 19]$

E. $A \in [-1.1, 1]$, $B \in [0.5, 2.7]$, and $C \in [3, 5]$

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4. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

   Perpendicular to $5x - 3y = 15$ and passing through the point $(5, 4)$.

   A. $m \in [-0.67, -0.16]$ $b \in [-7.6, -3.6]$

   B. $m \in [-0.67, -0.16]$ $b \in [6.5, 9.2]$

   C. $m \in [-0.67, -0.16]$ $b \in [-2, -0.9]$

   D. $m \in [0.54, 1.76]$ $b \in [0.2, 1.3]$

   E. $m \in [-1.98, -1.35]$ $b \in [6.5, 9.2]$

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5. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{8x + 3}{7} - \frac{-3x + 8}{4} = \frac{7x + 4}{3}$$

   A. $x \in [-21.5, -19.9]$

B. $x \in [1.5, 4.4]$

C. $x \in [-0.4, 1.7]$

D. $x \in [-7.1, -4.1]$

E. There are no real solutions.

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6. Find the equation of the line described below. Write the linear equation in the form $y = mx + b$ and choose the intervals that contain m and b.

Parallel to $8x + 9y = 9$ and passing through the point $(6, 4)$.

A. $m \in [-1, 0.3]$ $b \in [-2.73, -1.89]$

B. $m \in [-1.3, -0.9]$ $b \in [9.04, 9.97]$

C. $m \in [-0.3, 2.8]$ $b \in [-1.84, -0.93]$

D. $m \in [-1, 0.3]$ $b \in [-10.03, -8.99]$

E. $m \in [-1, 0.3]$ $b \in [9.04, 9.97]$

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7. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(-16x - 2) = -9(10x + 5)$$

A. $x \in [0.1, 0.21]$

B. $x \in [0.03, 0.14]$

C. $x \in [-0.26, -0.15]$

D. $x \in [-0.18, 0]$

E. There are no real solutions.

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8. First, find the equation of the line containing the two points below. Then, write the equation in the form $y = mx+b$ and choose the intervals that contain m and b.

$$(7, -2) \text{ and } (-9, 3)$$

A. $m \in [-0.44, 0.04]$ $b \in [-0.1, 1.7]$

B. $m \in [0.18, 0.4]$ $b \in [4.48, 6.93]$

C. $m \in [-0.44, 0.04]$ $b \in [-1.68, -0.09]$

D. $m \in [-0.44, 0.04]$ $b \in [11.59, 12.01]$

E. $m \in [-0.44, 0.04]$ $b \in [-9.78, -8.62]$

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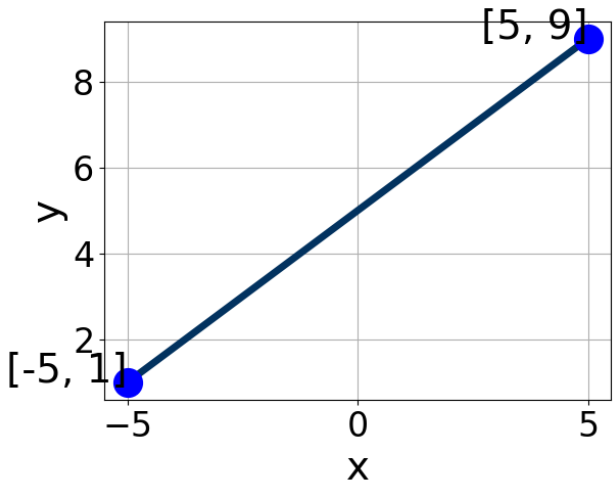
9. Write the equation of the line in the graph below in Standard Form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-5.1, -3.9]$, $B \in [3.46, 5.47]$, and $C \in [24, 29]$

B. $A \in [-3.8, 1.1]$, $B \in [-2.36, -0.99]$, and $C \in [-6, -4]$

C. $A \in [-3.8, 1.1]$, $B \in [0, 1.29]$, and $C \in [3, 7]$

D. $A \in [2.9, 7.6]$, $B \in [-5.22, -4.47]$, and $C \in [-26, -17]$

E. $A \in [2.9, 7.6]$, $B \in [3.46, 5.47]$, and $C \in [24, 29]$

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10. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x + 5}{2} - \frac{-6x + 9}{4} = \frac{-4x + 6}{5}$$

A. $x \in [0.2, 1.4]$

B. $x \in [10.7, 13.8]$

C. $x \in [-0.7, 0.2]$

D. $x \in [-5.1, -3.7]$

E. There are no real solutions.
